

VIII. *Description of a new Species of Paussus, from Southern Africa.* By J. O. WESTWOOD, F.L.S., &c.

[Read 5th April, 1847.]

Genus PAUSSUS, Linn.

(Section A. Prothorax quasi bipartitus.)

(Sub-sect. b. Antennarum clava postice excavata.)

(** Species Africanæ.)

Paussus Parrianus, Westw. (Pl. II. fig. 3, and details.)

Paussus testaceus; elytris nigris, basi apiceque testaceis exceptis; antennarum clava naviculari, margine postico subserrato, margineque infero excavationis integro; prothorace subbipartito.

Long. corp. lin. $2\frac{1}{2}$.

Habitat Port Natal.

In Mus. Parry et Westwood.

Corpus parvum, vix punctatum, tenuissime setulosum. Caput latitudine prothoracis, vertice plano, vel potius subconcavo, margine antico parum elevato, et in medio emarginato; margine postico etiam subelevato; subito in collum postice contractum. Palpi maxillares articulo 2^{do} magno subovali, apice interno haud porrecto; palpi labiales articulo apicali subinflato. Antennæ longitudini capituli et prothoracis equales, clava subelongata subcurvata, basi postice in cornu rectum producto, margine antico satis acuto; postico subtus excavato, margine supero excavationis 5-impreso, margine ejus infero integro simplice; apex clavæ antice rotundatus, postice vero subangulatus. Prothorax nitidus, sub-bipartitus; parte antica lateribus angulato-productis et subacutis, discoque in tubercula duo rotundata elevata producto, parte postica angusta, disco carinis elevatis literam W simulantibus, instructo. Elytra coriacea, parum setosa, nigra, subopaca, basi (cum scutello) margine tenui laterali apiceque (cum tuberculo ad angulum externum) rufo-testaceis. Pygidium rufopiceum, semicirculare, lateribus carinaque mediana subelevatis. Corpus subtus testacco-rufum, tenue punctatum, pedibus concoloribus, gracilibus; tibiis subangustis, calcaribus minutissimis, tarsorum articulis 4 basalibus longitudine fere æqualibus.

Fig. 3. The insect magnified; 3a, maxillary palpus; 3b, labial palpus; 3c, 3d, antennæ, from below and above; 3e, apex of tibia and tarsus.

This new species belongs to the African subdivision of the *Paussi*, which possess a subbipartite prothorax and an excavated clava to the antennæ; although its general appearance bears a much nearer resemblance to some of the Asiatic species, especially *P. Fichtelii* and *thoracicus*. The flattened crown of the head, with the posterior and anterior margins somewhat elevated and acute, distinguish it from all the African species to which it is nearest allied. From *P. ruber* and *cochlearius* it is further distinguished by the more linear clava of the antennæ and the black disc of the elytra; the former character, narrower feet, and ferruginous colour, distinguish it from *P. excavatus*, whilst the narrower posterior part of the prothorax, and the structure of the antennæ and feet, distinguish it from *P. Klugii* and *Latreillii*. These four African species are represented with their details upon one plate in my "Arcana Entomologica" (vol. ii. pl. 91), so that the distinctions of the species are apparent at a glance. Having been indebted to Captain Parry for my acquaintance with this interesting insect, it is with much pleasure that I have dedicated it to him, as a slight return for the many opportunities which he has afforded me of examining portions of his valuable collection.

Shortly after the preceding description was read before the Society, Mr. Benson arrived in England, bringing with him specimens of *Paussus Parrianus*, which he kindly communicated to me, with the following

*Notes on the Capture of Paussi, at the Cape of Good Hope,
by W. H. Benson, Esq.*

25th April, 1846. Under a stone at Camp's Bay, on the western face of Table Mountain, I captured a species of *Paussus Burmeisteri*, Westw., which stained my finger when seized, as I had observed its congeners do in Hindustan. It was surrounded, and at first screened from view, by small brown ants, some of which were winged. Westwood notes that Hope's and Westermann's specimens have no appendages to the abdomen; mine has two diverging spines set a little apart, near the middle of the podex, underneath.

8th June. Between the end of Hope Street, Cape Town, and Table Mountain, and on the skirts of the Devil's Peak, discovered under a stone, near a rill, and in rather a moist spot, eight specimens of the *Paussus*, since called *Parrianus* by Westwood, from a specimen from Port Natal, and which a reference to the monograph in the "Arcana" showed to be undescribed. They were

among crowds of ants, some on the under face of the stone, others in the ruins of the ants' nests. Several of them crepitated and stained my fingers.

13th June. Two more specimens of *Paussus Parrianus*, among ants, under the loose bark of a felled and decaying oak tree, on the eastern base of Table Mountain, and by the side of a lane running from Newlands towards Protea and Hout Bay.

15th June. Two other specimens on the same log. These were undisturbed during my previous search, as fatigue prevented my stripping off the whole of the bark. The whole of these captures were made upon crutches, during short explorations in places to which a wheeled carriage could convey me. My success, under such circumstances, shows what might be done in the locality by an active collector.

26th June. Three specimens among ants again, under the bark of a felled fir-tree lying near the same spot.

29th. A single specimen, under a stone, near the spot where I made my first capture. It inhabited a formicary like the rest, but this was the first instance in which I found this gregarious species unassociated with another of its own kind.

7th September. While searching on the skirts of the Devil's Peak, near the third milestone between Cape Town and Rondebosch, for specimens of *Graphipterus 3-lineatus*, Dejean, I found under a stone, with its usual companions, my 17th specimen of *Paussus Parrianus*, and on the 21st September I obtained three more under similar circumstances near the same spot. It is singular that a species, comparatively so abundant, should so long have eluded the search of entomological visitors to the Cape, more especially of Thunberg, who brought *P. lineatus* and *ruber* thence.

The abundance of specimens creating an indifference regarding the chance of losing specimens not at once secured and set, enabled me to keep some alive for a time to observe their habits. In so doing, I discovered at least one use of the singular club of the antennæ: these beetles, when thrown on their backs on writing paper, were, from their flatness in that part, and the shortness of their feet, unable to turn themselves over, until, by turning an antennæ back, making the joint rigid, and using the club as a lever, they throw themselves sufficiently over on one side to gain their feet. When I deprived them of the assistance of their antennæ, by placing them with their heads beyond the edge of the paper, their struggles to regain their proper position, by means of their feet alone, were ineffectual. A club composed of many

loose joints would have been useless, and the attempt to render each individual joint rigid would have been fatiguing to the muscles.

I could detect no sexual distinctions in *Paussus Parrianus* in external appendages. The specimens vary much in size, and one variety has very little dark colour on the elytra.

A letter from Dr. Bacon received to-day tells me that he has taken two more new *Paussi*; one on the 17th April, in the clutches of an ant, the other on the 13th May, flying. The first, he says, is certainly quite new; the second, he says, comes nearest to *P. denticulatus*. His collection of species, in all the orders, amounts now to 3716, of which 2103 are *Coleoptera*.

IX. *Descriptions of some new Species of Exotic Cetoniidæ.*
By the Rev. F. W. Hope, F.R.S., &c.

[Read 5th January, 1846.]

Sp. 1. *Diplognatha Herculeana*, Hope. (Pl. IV. fig. 1.)

Affinis *D. gagati*, Olivier, at multo major. Tota atra, nitida, clypeo truncato, reflexo; thorace fere in medio binis punctis elevatis notato; elytra glaberrima, absque striis punctisque ullis. Sternum in mucronem obtusum productum. Pedes nigri, pilis nigris tibiisque dentato-spinosis.

Long. lin. 15, lat. lin. 8.

Habitat circa Palmas, in Africa tropicali occidentali.

In Musæo Dom. Hope.

Received in the year 1845 from the Rev. T. Savage of Cape Palmas. Mr. MacLeay has, I think, very properly considered *gagates*, Fab., as typical of his subgroup *Gagatesiæ*. (Vid. Illustrations of Annulosa of South Africa, iii. 22.) Dr. Burmeister has united *Cetonia Hebræa*, of Olivier, with the same genus; I am inclined, however, to place *Hebræa* with other species in a subgenus, as they differ in form and colouring, and cannot properly be ranked under *Gagatesiæ*. To the former group belong *Silicea* of MacLeay, *pectoralis* of Bainbridge, and the typical *gagates*. *Campsiura*, with which Burmeister seems inclined to place it, is quite another form.

Fig. 1a, mandible; 1b, maxilla; 1c, mentum; 1d and 1e, mesosternal process.